ABSTRACT OF THE DISCLOSURE

Under electric control of a motor by a CPU, before the rotation angle of a rotary knob reaches a predetermined angle (20°, 40°, 60°, ... 360°), a torque in the same direction as a rotational direction is provided from the motor to the rotary knob, and the torque is decreased from a maximum value to zero. When the rotation angle of the rotary knob reaches a predetermined angle, a torque product is provided to the rotary knob depending upon an angular velocity of the rotary knob. After the rotation angle of the rotary knob exceeds a predetermined rotation angle, a torque in the reverse direction to a rotational direction is provided to the rotary knob, and the torque is increased from zero to a maximum value.